

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A positive planographic printing plate precursor comprising a hydrophilic support, and an organic undercoating layer, a lower layer and an image recording layer disposed on the hydrophilic support, wherein:

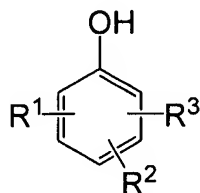
the lower layer includes a water-insoluble and alkali-soluble resin in an amount of 0.1 to 5.0 g/m², and

the image recording layer includes a novolak type phenolic resin containing phenol and m-cresol as structural units, in which m-cresol is contained in an amount of 10% by mole or more of the total amount of the resin and wherein the novolak type phenolic resin has a weight average molecular weight of from 1,000 to 10,000, and a light-to-heat conversion agent, and

the image recording layer exhibits increased solubility in an alkaline aqueous solution when exposed to an infrared laser.

2. (original): A planographic printing plate precursor according to claim 1, wherein the novolak type phenolic resin contains phenol as a structural unit thereof in a range of from 20 to 90% by mole.

3. (original): A planographic printing plate precursor according to claim 1, wherein the novolak type phenolic resin is a resin obtained by condensing of phenol and a substituted phenol represented by the following general formula (I) with an aldehyde:



General formula (I)

wherein R¹ and R² each independently represent a hydrogen atom, an alkyl group or a halogen atom; R³ represents an alkyl group or cycloalkyl group having 3 to 6 carbon atoms.

4. (original): A planographic printing plate precursor according to claim 3, wherein a phenol content in monomers constituting the resin obtained by condensing of phenol and a substituted phenol represented by general formula (I) with an aldehyde is in a range of from 21 to 90% by mole.

5. (previously presented): A planographic printing plate precursor according to claim 1, wherein the novolak type phenolic resin further comprises xyleneol as a structural unit thereof.

6. (previously presented): A planographic printing plate precursor according to claim 1, wherein a phenol content in monomers constituting the novolak type phenolic resin is in a range of from 21 to 90% by mole.

7. (canceled).

8. (original): A planographic printing plate precursor according to claim 1, wherein the image recording layer contains a novolak type phenolic resin other than the novolak type

phenolic resin containing phenol as a structural unit thereof in an amount of from 5 to 50 % by weight based on a total solid content of all the phenolic type novolak resins.

9. (currently amended): A planographic printing plate precursor according to claim 1, wherein the image recording layer contains a water-insoluble and alkali-soluble resin other than the novolak type phenolic resins selected from the group consisting of a polyamide resin, an epoxy resin, an acetal resin, an acrylic resin, a methacrylic resin, a styrene based resin and a urethane resin.

10. (original): A planographic printing plate precursor according to claim 1, wherein the image recording layer contains a onium salt.

11. (currently amended): A planographic printing plate precursor according to claim 1, wherein the water-insoluble and alkali-soluble resin included in the lower layer is selected from the group consisting of a polyamide resin, an epoxy resin, an acetal resin, an acrylic resin, a methacrylic resin, a styrene based resin and a urethane resin.

12. (original): A planographic printing plate precursor according to claim 1, wherein the image recording layer includes the novolak type phenolic resin and the lower layer includes an acrylic resin.

13. (original): A planographic printing plate precursor according to claim 1, wherein the lower layer includes a light-to-heat conversion agent.

14. (new): A positive planographic printing plate precursor comprising a hydrophilic support, and a lower layer and an image recording layer disposed on the hydrophilic support, wherein:

the lower layer includes a water-insoluble and alkali-soluble resin in an amount of 0.1 to 5.0 g/m², and

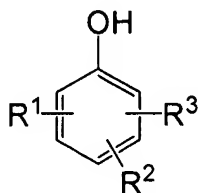
the image recording layer includes a novolak type phenolic resin containing phenol and m-cresol as structural units, in which m-cresol is contained in an amount of 10% by mole or more of the total amount of the resin, and a light-to-heat conversion agent, and

the image recording layer exhibits increased solubility in an alkaline aqueous solution when exposed to an infrared laser,

wherein the image recording layer contains a water-insoluble and alkali-soluble resin other than the novolak type phenolic resins selected from the group consisting of a polyamide resin, an epoxy resin, an acetal resin, an acrylic resin, a methacrylic resin, a styrene based resin and a urethane resin.

15. (new): A planographic printing plate precursor according to claim 14, wherein the novolak type phenolic resin contains phenol as a structural unit thereof in a range of from 20 to 90% by mole.

16. (new): A planographic printing plate precursor according to claim 14, wherein the novolak type phenolic resin is a resin obtained by condensing of phenol and a substituted phenol represented by the following general formula (I) with an aldehyde:



General formula (I)

wherein R¹ and R² each independently represent a hydrogen atom, an alkyl group or a halogen atom; R³ represents an alkyl group or cycloalkyl group having 3 to 6 carbon atoms.

17. (new): A planographic printing plate precursor according to claim 16, wherein a phenol content in monomers constituting the resin obtained by condensing of phenol and a substituted phenol represented by general formula (I) with an aldehyde is in a range of from 21 to 90% by mole.

18. (new): A planographic printing plate precursor according to claim 14, wherein the novolak type phenolic resin further comprises xylenol as a structural unit thereof.

19. (new): A planographic printing plate precursor according to claim 14, wherein a phenol content in monomers constituting the novolak type phenolic resin is in a range of from 21 to 90% by mole.

20. (new): A planographic printing plate precursor according to claim 14, wherein the image recording layer contains a novolak type phenolic resin other than the novolak type phenolic resin containing phenol as a structural unit thereof in an amount of from 5 to 50 % by weight based on a total solid content of all the phenolic type novolak resins.

21. (new): A planographic printing plate precursor according to claim 14, wherein the image recording layer contains a onium salt.

22. (new): A planographic printing plate precursor according to claim 14, wherein the water-insoluble and alkali-soluble resin included in the lower layer is selected from the group consisting of a polyamide resin, an epoxy resin, an acetal resin, an acrylic resin, a methacrylic resin, a styrene based resin and a urethane resin.

23. (new): A planographic printing plate precursor according to claim 14, wherein the image recording layer includes the novolak type phenolic resin and the lower layer includes an acrylic resin.

24. (new): A planographic printing plate precursor according to claim 1, wherein the lower layer includes a light-to-heat conversion agent.